heat with free access of air the animal matter will be burned out.

Analysis of Bone.

The earthly matter consists of	
Phosphate of Lime	51.04
Carbonate of "	11.30
Fluoride of Calcium	2.00
Phosphate of Magnesia	1.16
Chloride of Sodium	
The animal matter is composed of	
Chondrine	32.17
Fat	1.13

The above is the analysis of healthy bone, in disease the constituents vary. In young animals the bones of the legs sometimes bend very much, this occurrence is owing to a *deficiency* of earthy matter, and is common in foals and dogs. In old age the bone becomes more brittle and in some cases quite fragile, this arises from a decrease of animal matter.

The bones of the horse are two hundred and forty two in number, and form what is termed the skeleton. In studying the skeleton anatomically, for descriptian it is divided into Head, Trunk, and Extremities.

The trunk consists of the vertebral column, ribs, sternum and pelvis, the vertebral column is made up of a number of single bones termed vertebrae, united to one another by an elastic cartilaginous substance. This column is subdivided into four regions, viz., (B B) the cervical, or those of the neck, (C C) the dorsal, or those of the back; the lumbar, those of the loins; and (E E-F) the sacro coceygeal including sacrum and bones of the tail.

Each region possess certain characters peculiar to itself—a true vertebra has a body, an arch; spinous, oblique, and transverse processes, a hole called the vertebrae foramen, through which passes the spinal cord.

The vertebrae of the neck, or cervical, are seven in number, they possess much longer and larger bodies, than any other vertebrae. The dorsal, or those of the back, are eighteen in number, and are the principal agents in supporting weight, their bodies are smaller than those of any other vertebrae and are short, thick, and somewhat circular—the spinous processes are long and flat—the spine of the first is the shortest, gradually increasing in length to the fifth, which is termed the point of the withers; from the fifth to the thirteenth they gradually decrease in length and incline backwards. The vertebrae of the loins or lumbar are shorter in their bodies in proportion to the size of the horse than in any other animal, they are six in number and are more symmetrical in form than the vertebrae of either the back or neck.

The sacrum or rumpbone in the foetus is made up of five distinct bones, united by fibro cartilage, in the adult becoming ossified, it forms the superior part of the pelvis, P. The pelvis is formed by two bones called the ossa inominata, situated one on each side of the spine. The oss inominata is made up of three bones joined together at the acetablum, the three bones forming it are the illium, ischium, and pubis. The upper part of the illum is broad and expanded, forming what is called the haunch or hip bone, and terminating anteriorly in four eminences; of the two larger, one is called the superior, the other the inferior anterior spine; the others are called tubercles, and are all for the attachment of the large muscles which occupy this region. When the superior anterior spine is knocked off the horse is said to be hipped.

The lower part of the illium forms with the ischium, and pubis a cavity called the acetablum which unites with the head of the Femur (Q) or whirlbone forming the hip joint.

The *ischium* is flat and quadrilateral in shape, and extends from the acetablum backwards, terminating in a prominence called the tuberosity of the ischium, this part is often knocked down from blows, &c., giving rise to a flat appearance of the hind quarters. The pubis forms the centre part of the pelvis, the juncture of the two is called the symphisis pubis.

Connected with the vertbral column are the ribs (*iii*). These consist of a series of bony arches usually thirty-six in number, eighteen on either side; occasionally there exists thirty-eight and even forty ribs; they are divided into two classes, true or sternal, false or asternal. The true ribs are those whose cartilages are inserted into the sternum or breast-bone, eight in number. The false are only connected with the sternum through the intervention of others. The upper extremity of each rib is divided into three parts, head, neck, and tubercles; between the head of each rib and the body of the vertebrae there exists a true synovial joint. Running along the posterior border of all the ribs, with the exception of the first is a groove in which lie the intercostal bloodvessels and nerves.

The extremities are divided into fore and hind, the fore extremity consists of (G) the scalpula, (K) humerous, (L) radius, (M) ulnas, (N) carpus orknee, corresponding to the wrist in the human subject, (O) the metacarapal or shank bones and (6) bones of the pastern and foot.

Editorial Notices, &c.

The British Reviews:—

We have received, through Mr. Rowsell, of this city, the American Edition of the current numbers of the *London Quarterly*, the *Edinburgh*, and the *North British* Reviews. In these able exponents of British literature, science and politics, the reader is kept acquainted with the state and progress of all great questions affecting the political, social, and moral condition of mankind generally. Each of these Reviews has a characteristic article on the great American conflict in the current numbers.